OMAP™ 3 / 4 BoF

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Introduction & Agenda

- BoF Time: 18:30-19:30
- OMAP SoC – Introduction
- Board Design & Bringup
- Development & Porting for OMAP
- Development platforms
- OMAP in Opensource
- Resources

OMAP SoC - Introduction

Board Design

- X-loader (MLO)
- U-boot – mainline
  - Steve Sakoman's efforts to upstream
  - Ubuntu 10.10 is using the mainline u-boot
  - Network boot (KS8855 for Panda+Zippy2, Blaze)
- Boot u-boot utilities (http://code.google.com/p/omap-u-boot-utils/)
  - Now supports OMAP4
  - Need suggestions on what features you need!

OMAP Board Bringup

- Bringup
  - OMAP EHCI PHY
    - SMSC & TI part now available
  - TCA6424 (I2C GPIO Expander)
  - Driver supporting large keyboard matrix (upto 8x16)
  - SN75LVDS83B (1,8V part – no need of level shifters to I/f to OMAP)
  - Board bring-up utilities : http://elinux.org/Board_Bringup_Utilities

Development Platforms

3430

Full Functionality

Zoom-II MDP

Low Cost

18,000 shipped

Beagleboard

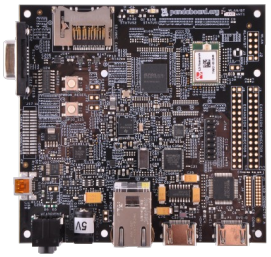
3630

Zoom 36x MDP

Beagleboard-xM

4430

Blaze



PandaBoard

What features & platforms you want to see to aid in embedded linux development

NOTE: This slide shows some of the many available OMAP development platforms

OMAP in Open source

- Kernel support
- OpenOCD support
- Access to various OSS projects which work on OMAP
- Developer presence and interest
- Community
  - Is there a large enough community?
  - Did you get support from community to help solve your design problem?
  - The good & things to improve.

Code Trees!

- Upstream trees:
  - http://git.kernel.org/?p=linux/kernel/git/tmlind/linux-omap-2.6.git;a=summary
- git.omapzoom.org
  - TI's product development & integration trees
- Bunch of gitorious/github trees:
  - Quite a few developer clone trees hang in there
  - gitorious.org/pandaboard & gitorious.org/beagleboard are HW board validation trees.
- Going cross-eyed?
  - A good place to start is at: http://omappedia.org/wiki/Linux_Kernel_Int_Trees

Resources

- OMAP Platform Information: http://OMAPworld.com & http://omap.com
- Community Wiki: http://OMAPpedia.org
- IRC (on irc.freenode.net):
  - #linux-omap – generic OMAP, Linux related discussion
  - #beagle – Beagleboard related discussions
  - #pandaboard – PandaBoard Related discussion
- Mailing lists:
  - linux-omap@vger.kernel.org - OMAP Linux kernel list
  - omapdiscuss@googlegroups.com - Generic OMAP discsussion
  - pandaboard@googlegroups.com - PandaBoard discussions
  - beagleboard@googlegroups.com - Beagleboard discussions